

What is claimed is:

1 1. A non-intrusive access control method,
2 comprising the steps of:
3 acquiring identification of a first tag and real-
4 time circumstance information both related to a
5 detection area; and
6 determining whether the first tag is permitted based
7 on circumstance identification corresponding to
8 the detection area, the identification of the
9 first tag and the real-time circumstance
10 information.

1 2. The method as claimed in claim 1, wherein the
2 real-time circumstance information comprises user
3 information indicating existence of any other tag in the
4 detection area.

1 3. The method as claimed in claim 1, wherein the
2 real-time circumstance information comprises time
3 information comprising at least current time or total
4 time.

1 4. The method as claimed in claim 1, wherein the
2 real-time circumstance information comprises physical
3 information indicating status of an object.

1 5. The method as claimed in claim 1, wherein, when
2 a plurality of tags exist in the detection area, a tag
3 thereof corresponding to the highest level user role
4 among the user roles of the tags is identified as the
5 first tag representing the tags.

1 6. The method as claimed in claim 1, wherein the
2 identification of the first tag corresponds to a user
3 role, as one of a plurality of user roles corresponding
4 to a plurality of levels.

1 7. The method as claimed in claim 6, further
2 comprising determining that the first tag is permitted,
3 when a plurality of tags exist in the detection area, and
4 a tag thereof corresponding to a user role with higher
5 rank than the user role of the first tag.

1 8. The method as claimed in claim 1; wherein the
2 corresponding circumstance identification of the
3 detection area corresponds to a circumstance role, as one
4 of a plurality of circumstance roles with hierarchical
5 relationship, each comprising at least one circumstance
6 attribute.

1 9. The method as claimed in claim 8, further
2 comprising defining the hierarchical relationship based
3 on the circumstance attribute before the determining
4 step.

1 10. The method as claimed in claim 1, wherein the
2 determining step is based on one or more policies each
3 recording the relationship of user role, circumstance
4 role, real-time circumstance information and permission.

1 11. The method as claimed in claim 10, wherein the
2 policies is presented in extensible markup language (XML)
3 format.

1 12. The method as claimed in claim 10, further
2 comprising the steps of:

3 searching for policies related to the circumstance
4 identification corresponding to the detection
5 area, the identification of the first tag and
6 the real-time circumstance information;

7 determining the first tag is not permitted when no
8 policy allowing permission is located; and

9 determining the first tag is permitted when at least
10 one related policy with permission and no
11 related policy denying permission is located.

1 13. An non-intrusive access control system,
2 comprising:

3 a sensor for acquiring identification of a first tag
4 and real-time circumstance information both
5 related to a detection area; and

6 a computing device for determining whether the first
7 tag is permitted based on circumstance
8 identification corresponding to the detection
9 area, the identification of the first tag and
10 real-time circumstance information.

1 14. The system as claimed in claim 13, wherein the
2 real-time circumstance information comprises user
3 information indicating whether another tag exists in the
4 detection area.

1 15. The system as claimed in claim 13, wherein the
2 real-time circumstance information comprises time

3 information comprising at least current time or total
4 time.

1 16. The system as claimed in claim 13, wherein the
2 real-time circumstance information comprises physical
3 information indicating status of an object.

1 17. The system as claimed in claim 13, wherein,
2 when a plurality of tags exist in the detection area, the
3 computing device treats a tag corresponding to the
4 highest ranked user role among the user roles of the tags
5 as the first tag representing the tags.

1 18. The system as claimed in claim 13, wherein the
2 identification of the first tag corresponds to a user
3 role, as one of a plurality of user roles corresponding
4 to a plurality of levels.

1 19. The system as claimed in claim 18, wherein the
2 computing device further determines that the first tag is
3 permitted, when a plurality of tags exist in the
4 detection area, and a tag thereof corresponding to a user
5 role with higher rank than the user role of the first
6 tag.

1 20. The system as claimed in claim 13, wherein the
2 computing device performs the determination step based on
3 one or more policies each comprising the relationship of
4 user role, circumstance role, real-time circumstance
5 information and permission.

1 21. The system as claimed in claim 20, wherein the
2 computing device further searches for policies related to

3 the circumstance identification corresponding to the
4 detection area, the identification of the first tag and
5 the real-time circumstance information, and determines
6 the first tag is not permitted when no related policy
7 allowing access is located or determines the first tag is
8 permitted when at least one policy with permission and no
9 related policy denying access is located.

1 22. The system as claimed in claim 15, wherein the
2 non-intrusive access control system comprises a radio
3 frequency identification (RFID) system.